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| 10/668,655 | 09/22/2003 | Stefano Benedetto Previdi | 50325-0812 | 2072 |

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EXAMINER

BURROWES, LAWRENCE J

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| ART UNIT | PAPER NUMBER |
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2619

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12/28/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/668,655

Applicant(s)

PREVIDI ET AL.

Examiner

LAWRENCE J. BURROWES

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2007.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/15/07 & 11/21/07.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1, 4-6 and 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joint Technical Committee "Information technology — Telecommunications and information exchange between systems — Intermediate System to Intermediate System intra-domain routing information exchange protocol for use in conjunction with the protocol for providing the connectionless-mode network service (ISO 8473)" hereafter JTC, in view of Zinin (7,065,059).

For claims 1, 6, 11 and 13, JTC disclose a method, computer-readable medium, and apparatus of establishing adjacencies on a network, the method, computer-readable medium, and apparatus comprising, at a first node of the network,

a processor with one or more sequences of instructions (see page 133 section 12.1.2.4.3, there is a processor since processor resources are allocated to the queues);

sending hello packets on the network (see page 20 section 7.2.4, hello PDU are exchanged between the Intermediate systems on the network);

receiving hello packets from other nodes on the network on the basis of the received hello packets (see page 20 section 7.2.4, hello PDU are exchanged between the Intermediate systems on the network);

interrogating a link-state adjacency table (see page 12 section 6.8.1 and page 14 Figure 3, link state database contains adjacency information) and, when only one adjacency is listed in the link-state table, sending a further link-state packet with the adjacency information and the overload bit set (see page 4 section 3.6.3 and page 53 Table 5, adjacency information is created and used for routing packets);

and

on convergence of a forward cache, sending a further link-state packet with adjacency information and without the overload bit set (see page 13 section 6.8.3 and page 14 Figure 3 Box 11, determines adjacency and generates error codes if needed which would set the overload error bit).

JTC disclose all the limitations of the claimed invention except sending a link-state packet without adjacency information and without an overload bit set.

Zinin from the same or similar fields of endeavor teaches sending a link-state packet without adjacency information and without an overload bit set (see

column 4 lines 38-49, link state Update packet is an empty multicast packet that does not contain any adjacencies or set bits).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify/implement the link state update packet into the network by programming the router to send these messages. The motivation to do so would be so that the increased efficiency of the network connections can be achieved.

Regarding claims 4 and 9, wherein the network uses Intermediate System-to-Intermediate System protocol (see JTC page 1 Scope, uses an intermediate system to intermediate system exchange protocol) and wherein the adjacency information is advertised in a Type Length Variable field of the link-state packet (see JTC page 69 section 7.3.8, variable length field).

For claims 5, 10, 12 and 14, JTC disclose a method, computer-readable medium, and apparatus of re-establishing adjacency in an inter-networked system (see page 22 section 7.2.10, the adjacency database gets updated and systems are reconnected), the method, computer-readable medium, and apparatus comprising:

a processor with one or more sequences of instructions (see page 133 section 12.1.2.4.3, there is a processor since processor resources are allocated to the queues);

- i) determining that adjacency establishment is required (see page 20 section 7.2.4, hello PDU are exchanged between the Intermediate systems on the network);
- ii) transmitting a message to discover neighboring network elements (see page 20 section 7.2.4, hello PDU are exchanged between the Intermediate systems on the network to discover each other);
- iii) receiving messages from neighboring network elements (see page 20 section 7.2.4, hello PDU are exchanged between the Intermediate systems on the network); and
- iv) in response to the received messages, generating a link-state packet (see page 12-13 sections 6.8.1-6.8.2 and page 20 section 7.2.4, link state PDUs are exchanged);
- vi) interrogating a link-state adjacency table (see page 12 section 6.8.1 and page 14 Figure 3, link state database contains adjacency information) and, when only one adjacency is listed in the link-state table, sending a further link-state packet with the adjacency information and the overload bit set (see page 4 section 3.6.3 and page 53 Table 5, adjacency information is created and used for routing packets); and
- vii) on convergence of a forward cache, sending a further link-state packet with adjacency information and without the overload bit set (see page 13 section 6.8.3 and page 14 Figure 3 Box 11, determines adjacency and generates error codes if needed which would set the overload error bit).

JTC disclose all the limitations of the claimed invention except v) sending the link-state packet without adjacency information and without an overload bit set.

Zinin from the same or similar fields of endeavor teaches v) sending the link-state packet without adjacency information and without an overload bit set (see column 4 lines 38-49, link state Update packet is an empty multicast packet that does not contain any adjacencies or set bits).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify/implement the link state update packet into the network by programming the router to send these messages. The motivation to do so would be so that the increased efficiency of the network connections can be achieved.

4. Claims 2, 3, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over JTC in view of Zinin, and in further view of Shand et al "Restart signaling for IS-IS" hereafter Shand (article submitted by applicant).

For claims 2, 3, 7 and 8, JTC in view of Zinin disclose all the limitations of the claimed invention except the first node is a restart node and the restart node is a router restart.

Shand from the same or similar fields of endeavor teaches the first node is a restart node (see page 3 section 4.2.1, the main router signals that is the restart router) and the restart node is a router restart (see page 3 section 4.2.1, the main router signals that is the restart router).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify/implement the restart router of Shand into the intermediate system of JTC by programming a router to be able to restart.

The motivation to do so would be so that the router can repair itself incase it is overloaded so it would operate in an efficient manner.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Belser et al (6449279), Friedman (7248579) and Soloway et al (5265092).

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Response to Arguments

6. Applicant's arguments, see page 7, filed 15 October 2007, with respect to 101 rejections have been fully considered and are persuasive. The 101 rejection of 6-10 has been withdrawn.

7. Applicant's arguments, see pages 7-9, filed 15 October 2007, with respect to the rejection(s) of claim(s) 1, 4-6 and 9-14 under 102(e) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Zinin (7,065,059).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAWRENCE J. BURROWES whose telephone number is (571) 270-1419. The examiner can normally be reached on Monday - Thursday 5:30am - 2pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan D. Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LJB



EDAN .ORGAD
SUPERVISORY PATENT EXAMINER

